

WE CLAIM:

1. A page stacking and binding system comprising:
 - a) a support tray for receiving pages to be stacked, the support tray including a support surface on which the pages are stacked and at least two side walls coupled to the support surface;
 - b) a drive system arranged so as to direct pages into the support tray at a position above the support surface, thereby causing the pages to float into position on at least one of the support surface and the stack;
 - c) a vibrator interacting with the tray so as to induce vibration therein to assist in alignment of the pages as they float into position, thereby ensuring the stacked pages are aligned; and,
 - d) a press device adapted to apply a compressive force to the stack of pages, adjacent an edge of the stack, to thereby bind the pages.
- 15 2. The apparatus of claim 1 wherein the support surface of the tray is of adjustable height relative to the press device, so as to ensure that an upper page of the stack is situated at a predefined level for interaction with the press device.
- 20 3. The apparatus of claim 1 wherein the tray has a support surface having one corner that is lower than other portions of the support surface.
4. The apparatus of claim 3 wherein the two side walls extend substantially perpendicularly to each other so as to define a corner, the corner being aligned with the lower corner of the support surface
- 25 5. The apparatus of claim 1, the drive system being adapted to direct pages into the support tray bear against the two side walls for alignment of the pages within the stack.
- 30 6. The apparatus of claim 1 wherein vibration of the tray is damped by dampers.
7. The apparatus of claim 1 wherein the tray is supported by a frame.

8. The apparatus of claim 7 wherein the tray is suspended from the frame.
9. The apparatus of claim 7 wherein dampers extend from the tray to the frame.
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10. The apparatus of claim 1 wherein the vibrator is a subsonic vibrator.
11. The apparatus of claim 4 wherein the support surface of the tray is movable as each page is delivered thereto.
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12. A method of stacking and binding pages using a support tray including a support surface on which the pages are stacked and at least two side walls coupled to the support surface, the method comprising:
 - a) delivering pages one after another to the support tray, the pages being directed into the support tray at a position above the support surface, thereby causing the pages to float into position on at least one of the support surface and the stack;
 - b) vibrating the support tray during and after delivery to thereby align the pages in the stack; and,
 - c) placing a compressive force on the stack to thereby bind the stack.
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13. The method of claim 12, the method including placing the compressive force on the stack using a press device.
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14. The method of claim 13, the method further including applying adhesive to an edge of the papers, and applying the compressive force to the edge of the stack corresponding to the edge of pages to which the adhesive is applied, thereby causing the adhesive to bond the pages together.
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15. The method of claim 12 wherein the step of aligning the pages comprises aligning the pages in a corner of a support surface of the tray, the corner being lower than other portions of the support surface.
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16. The method of claim 15 wherein the side walls extend substantially perpendicularly to each other, the method including aligning the pages by causing the pages to bear against the side walls.
- 5 17. The method of claim 12, the method including inducing the vibrations with a vibrator.
- 10 18. The method of claim 17 the method including supporting the support tray from a frame using dampeners, the method including vibrating the frame to thereby damp the vibrations applied to the support tray.
- 15 19. The method of claim 12, the method including adjusting the height of the support surface as each page as each page is delivered thereto, to thereby ensure the upper page of the stack is situated at a predefined level for interaction with the press device.